

REPORT

— OF THE —

NEW YORK METEOROLOGICAL BUREAU,

FOR THE MONTH OF

FEBRUARY, 1891.

CONTENTS.

	PAGE.
List of Observers,	Back of Front Cover.
Meteorological Summary,	2-3
Meteorological Data,	4-6
Mean Temperatures,	7-8
Precipitation,	9-11
Statistics of Temperature and Precipitation,	12
Verification of Predictions,	13
Maps,	—
List of Crop Correspondents,	Inside of Back Cover.

Central Office at Cornell University, Ithaca, New York.

METEOROLOGICAL SUMMARY FOR FEBRUARY, 1891.

The average Atmospheric Pressure (reduced to sea level and 32 deg. Fah.) for the State of New York during February, was 30.04 inches. The highest barometer was 30.78 inches, on the 15th, at Brooklyn; and the lowest was 29.25 inches, at Erie, Pa., on the 25th. The mean pressure increased eastward from the Great Lake region, and southward from the Champlain Valley, to a maximum value in the Coast region. At six stations of the Signal Service possessing barometric records for previous years, the average of the mean pressure for the month was about 0.06 inch below the normal value; the deficiency being greater in the Great Lake region than elsewhere.

The mean temperature for the State was 27.6 degrees; the highest daily mean, 43.4 degrees, occurring on the 25th; the lowest daily mean being 8.4 degrees, on the 4th. The highest local monthly mean was 38.0 degrees, at New York City; and the lowest was 19.2 degrees, at Lyon Mountain. The maximum temperature recorded during the month was 64.9 degrees, at Brooklyn, on the 17th; and the minimum was 19 degrees below zero, at Number Four in the Adirondack Region, on the 5th. The mean monthly range of temperature for the State was 54.7 degrees; the greatest range, 67 degrees, occurring at Ogdensburg and Potsdam, and the least, 43 degrees, at Fort Porter, Erie Co. The mean daily range for the State was 17.2 degrees; the maximum daily range, 47 degrees, occurring at Plattsburgh on the 15th, and the minimum, 00.0 degrees, at West Point on the 1st, and at Fort Hamilton on the 26th. The mean temperatures for the various sections of the State were as follows: The Western Plateau, 28.9 degrees; the Eastern Plateau, 27.8 degrees; the Northern Plateau, 20.5 degrees; the Coast Region, 35.7 degrees; Hudson Valley, 29.1 degrees; Mohawk Valley, 27.3 degrees; Champlain Valley, 23.2 degrees; St. Lawrence Valley, 23.7 degrees; Great Lake Region, 30.2 degrees; and the Central Lake Region, 29.5 degrees.—The average of the mean temperatures for the month, at 31 stations possessing records for previous years, was 4.3 degrees above the normal value. The excess amounted to 5 degrees or more for the Western Plateau, the Coast Region, the Mohawk Valley, and the Central Lake Region. The only station reporting a deficiency of temperature was West Point.

The mean Relative Humidity was 81.9 per cent. The mean Dew Point was 23.5 degrees.

The average Precipitation for the State was 3.87 inches of rain or melted snow; the heaviest general precipitation, 5.76 inches, occurring in the Mohawk Valley, while the least was 1.89 inches, in the Champlain Valley. The greatest local monthly precipitation was 8.24 inches, at Constableville, Lewis Co.; and the least was 0.99 inches, at Plattsburgh. The greatest daily precipitation was 2.46 inches, at Constableville, on the 25th; the maximum amounts reported from other stations being 1.80 inches at Sherman on the 16th, and 1.75 inches at Rome on the 8th. The average snow-fall over the State was 16.3 inches. The maximum general snow-fall was 37.8 inches, in the upper Mohawk Valley; on the Northern Plateau, 28.2 inches fell; over the Western and Eastern Plateaus, the Hudson and Champlain Valleys, and the regions of the Great and Central Lakes, the snow-fall ranged from 12 to 16 inches; while the least amount, 5.5 inches, occurred in the Coast Region.—The average precipitation at 28 stations having records for previous years, exceeded the normal amount by 0.94 inches. The greatest excess, amounting to 1.45 inches, occurred in the Hudson Valley, and the least, 0.09 inch, over the Northern Plateau. The precipitation was above the normal amount at all stations excepting White Plains and Canton, where slight deficiencies occurred.

The average number of days on which a precipitation of 0.01 inch or more of rain or melted snow occurred, was 12.4; an excess of two over the corresponding number for February, 1890. The average number of clear days was 4.8; of partly cloudy days, 10.3; and of cloudy days, 12.9. The maximum cloudiness occurred in the Great Lake Region, and the minimum in the western Coast Region.

The prevailing Wind direction was from the south-west.

Thunder storms were reported from scattered stations on the 21st and 25th; and on the 28th, were general over the eastern part of the State. Hail fell on the 7th, 8th, 9th, 20th, and 26th, and a sleet storm was reported on the 17th.

Solar Halos were observed on the 1st, 2nd, 4th, 5th, 11th, 12th, 15th, 16th, 19th, 23d, and 24th; and Lunar Halos occurred on the 1st, 15th, and 19th.

The Weather Predictions for this month have been verified as follows: For Weather, 87.7 per cent. were fulfilled; for Temperature, 86.2 per cent.; for Weather and Temperature combined, 87.0 per cent. were verified.

The data for the summary have been obtained from the records of 65 Volunteer Observers, 6 Signal Service Stations, 12 Military Posts, 23 Special Rain-Fall Observers, and 33 Display Stations, reporting this month to the Central Office of the Meteorological Bureau, at Ithaca, New York.

The weather of New York during February was influenced by nine areas of high pressure, and by ten cyclonic depressions, or about two less than the average number of storms traced by the Signal Service in the United States and its vicinity for previous Februaries. Seven of these storms passed centrally near or within the northern limits of New York, and one moved eastward over Canada at a considerable distance from the border. But one storm track was traced south of the State during the month, and one only visited the Atlantic coast. The disturbances were generally less intense than those of January, and few instances of an excessive daily precipitation or of high wind velocities occurred; but the storms were, in all cases, accompanied by rain or snow of moderate amounts, and hence over the greater part of the State the month had an unusual number of cloudy and rainy days, and a total precipitation somewhat above the average amount. The northward course of the storms gave prevailing warm southerly winds; but since seven of the nine anticyclones of February passed over this State, accompanied by falling temperatures, and in two cases giving exceptionally severe cold waves, the temperature conditions were extremely variable, and both the monthly and daily thermal ranges were much greater than usual.—Among the noteworthy features of the general distribution of pressure for February may be mentioned, the persistence of areas of high pressure over the north-western

States and British America, from which the greater number of anticyclones detached themselves, to move eastward across the continent. The second feature was a tendency to the formation of "troughs" of low pressure over the region between the Great Lakes and the Gulf and south-western States. This condition, which occurred in four instances during the month, had a decided influence upon the thermal conditions in New York and over the eastern States.

The first cyclone of the month, whose approach from the Great Lake region, caused a warm wave at the close of January, passed over the northern plateau of this State on the 1st, as an irregular depression of moderate intensity, and was attended by a snow-fall over the northern section and by rain in the remainder of the State. A large area of high pressure spread eastward over Canada in the rear of this storm, from which a branch moved south-eastward on the 2nd over the Atlantic coast States, giving a cold wave in northern New York; but in the southern and central parts of the State the high temperatures were maintained by southerly winds due to a trough of low pressure, which, on the 2nd and 3d extended from the Great Lakes to the Gulf. On the 4th this depression moved to the Atlantic coast, and was succeeded by the broad anticyclone previously referred to, which covered the Central and Eastern States, giving clear weather and the minimum temperatures of the month in the northern and coast sections of New York, and over the Plateaus. This anticyclone covered the entire Atlantic coast on the 6th, with a tongue projecting inland over the Southern States, from which the air flowed northward, giving an extremely rapid rise of temperature on the 6th. During the following day a cyclone, which originated in Texas, moved up the Ohio Valley and over Pennsylvania to the Coast, maintaining the mild weather at the southern and eastern stations of New York, and giving a precipitation of moist, tenacious snow, which overweighted tree branches and telegraph lines. The damage resulting from this cause in the City of Albany was estimated at over fifty thousand dollars. In the northern section the indraught of cold air toward this "low" from an anticyclone covering Canada on the 7th and 8th, gave a decided fall of temperature on these days; but a rise again occurred on the 9th, in advance of the 4th cyclone of the month, which passed from the upper lakes down the St. Lawrence Valley on the night of the 9th-10th. This storm was accompanied by a general precipitation, and by high southerly winds in the northern Champlain and St. Lawrence Valley; the maximum velocity reported being over 60 miles per hour, at Malone.

During the greater part of the period between the 10th and 16th, the pressure was much above the normal value over the central and eastern States, clear or fair weather prevailing during the greater part of the time. The first anticyclone of this period spread from the Gulf States north-eastward toward the coast on the 10th-11th, the mean temperature of this State falling about 10 degrees during its passage, but rising to its former value on the 12th, when the anticyclone passed off the Atlantic coast. The barometer again rose on the 13th, and a very extended area of high pressure (in which the former had originated) moved southward from British America over the Central United States, spreading in all directions, and giving clear and cold weather. The area of maximum pressure (30.7 inches) moved from Canada over New York to the coast, on the 14th and 15th, and was accompanied by the minimum temperature of the month at many of the central stations of the State.

In the rear of this "high", which spread south-eastward along the Atlantic coast; there developed a trough of low pressure between the Great Lakes and the Gulf of Mexico, the area of minimum pressure moving eastward near the Canadian border, and passing north of this State on the 16th, giving a southerly wind circulation from the "high" on the coast, and a great increase of temperature over New York. The main portion of the "trough" meanwhile moved eastward, giving continued south winds, and abnormally mild weather; numerous Signal Service stations in the Atlantic Coast States reporting, on the 18th, the highest temperatures ever observed at that date. Two centers of low pressure developed in the general depression, the first passing over Southern New York as a broad, ill-defined "low", on the 17th; the second disturbance moving north of the State on the following day. The precipitation accompanying these storms was moderate in amount, but with the melting of snow consequent upon the high temperatures, caused a rapid rise in the streams in all parts of the State. Between the 19th and the 23d, two areas of high pressure moved over New York from the central and north-western States, respectively, giving fair and cold weather, excepting on the 21st, when the 7th storm of the month passed over Canada, near the northern border of New York, giving a moderate precipitation and a temporary rise of temperature.

A distribution of pressure somewhat similar to that which caused the warm wave of the 17th, was initiated on the 24th by the formation over the central and south-western States, of a trough of low pressure, which afterwards moved eastward to the region between the Great Lakes and the Gulf. The area of minimum pressure passed from the Lakes through Canada to the coast on the 20th, giving southerly winds, and the maximum temperatures of the month at nearly all stations. The main body of ice in the Mohawk and upper Hudson rivers became dislodged at this time, and owing to its unusual bulk much damage resulted from the formation of blockades. At Albany the river rose 16 feet above mean tide, flooding the lower portion of the city; and at Schenectady the water was reported to be 10 inches higher than ever before recorded. Similar flooding was very general throughout the State; the Canisteo River at Waverly reaching the highest level attained since 1865. The depression or "trough" of low pressure accompanying this storm covered the greater part of the Atlantic coast on the 27th, and in it a secondary center of considerable intensity developed off the New England coast; the effects of the cyclone, for New York, being felt mainly in strong north-westerly winds, which caused a rapid fall of temperature over the State, on the 26th. The last cyclone of the month passed from the Great Lakes down the St. Lawrence Valley early on the 28th, as a slight depression, giving only a small precipitation in New York. On the 27th, an anticyclone passed from the Gulf States to the coast, thence spreading northward after the passage of the storm; and with a second area of high pressure which was south of the Great Lakes on the 28th, gave fair and colder weather over New York and the Eastern States at the close of the month.

METEOROLOGICAL DATA FOR FEBRUARY—1891.

METEOROLOGICAL DATA FOR FEBRUARY—CONTINUED.

LOCATION OF STATIONS.		BAROMETER.				HUMIDITY.		TEMPERATURE—(In Degrees Fah.)												SKY.		PRECIPITATION—(Inches.)			WIND.				
STATION.	COUNTY.	Mean	Highest	Lowest	Date	Monthly Range	Mean	Relative	Dew Point, (degrees)	Mean	Highest	Lowest	Date	Monthly Range	Mean Daily Range	Greatest Daily Range	Least Daily Range	Date	No. of Clear Days	No. of Partly Cloudy Days.	No. of Cloudy Days.	Total for the Month.	Greatest Daily	Average Daily	Total Snow Fall	Prevailing Direction.			
<i>Coast Region cont'd.</i>																													
East Hampton . . .	Suffolk . . .	30.11	30.75	15	29.42	26	1.33	78.2	29.1	35.1	61.0	25	14.0	5	47.0	13.9	25.0	24	5.0	8	4	12	12	15	6.26	0.95	.224	1.5	W.
Setauket . . .	Westchester . . .	"	30.75	15	29.42	25	1.32	82.5	23.2	*28.2	58.0	26	-5.0	15	50.4	15.8	37.0	15	0.0	1	5.7	9.0	13.3	12.3	4.65	1.60	.166	13.4	N. W.
David's Island . . .																													
Fort Schuyler . . .	"																												
White Plains . . .	"																												
<i>Hudson Valley . . .</i>																													
Albany . . .	Albany . . .	30.08	30.74	15	29.42	25	1.32	82.5	23.2	29.1	58.0	26	-5.0	15	50.4	15.8	37.0	15	0.0	1	5.7	9.0	13.3	12.3	4.65	1.60	.166	13.4	N. W.
Watervliet Arsenal . . .	"																												
Honeymead Brook . . .	Dutchess . . .																												
Poughkeepsie . . .	"																												
West Point . . .	Orange . . .																												
Boyd's Corners . . .	Putnam . . .																												
Carmel . . .	Putnam . . .																												
S. E. Reservoir . . .	"																												
Stephentown . . .	Rensselaer . . .																												
Marlborough . . .	Ulster . . .																												
Minnewaska . . .	"																												
Rondout . . .	"																												
Peekskill . . .	Westchester . . .	30.10	30.72	15	29.49	26	1.23																						
<i>Mohawk Valley . . .</i>																													
Rome . . .	Oneida . . .																												
Utica . . .	"	30.04	30.75	14	29.64	20	1.11																						
<i>Champlain Valley . . .</i>																													
Plattsburgh . . .	Clinton . . .	29.99	30.72	14	29.30	3	1.42	80.4	18.4	27.3	52.0	25	-5.0	f	54.5	18.3	35.0	14	6.0	m	1	15	12	15.0	5.67	1.75	.202	37.8	
Plattsburgh Barracks . . .	"																												
Saratoga . . .	Saratoga . . .																												
Queensbury . . .	Warren . . .																												
<i>St. Lawrence Valley . . .</i>																													
Malone . . .	Franklin . . .																												
Madison Barracks . . .	Jefferson . . .																												
Watertown . . .	"	29.99	30.66	14	29.26	25	1.40	79.9	19.9	*26.9	52.0	25	-5.0	5	57.0	21.4	38.0	15	6.0	q	7	10.2	12.3	12	3.12	1.00	.111	8.5	
Canton . . .	St. Lawrence . . .																												
Massena . . .	"																												
North Hammond . . .	"																												
Ogdensburg . . .	"																												
Potsdam . . .	"																												
<i>Great Lakes . . .</i>																													
Dunkirk . . .	Chautauqua . . .																												
Buffalo . . .	Erie . . .	29.99	30.65	14	29.27	25	1.38																						
Fort Porter . . .	"																												
Brockport . . .	Monroe . . .																												
Rochester . . .	Monroe . . .	30.02	30.69	14	29.33	25	1.36	80.2	24.0	*30.2	60.0	25	6.0	5	54.0	12.9	40.0	15	3.0	8	o	10	18	20	4.17	0.86	.147		N.W.
Fort Niagara . . .	Niagara . . .																												
Hess Road Station . . .	"																												
Baldwinsville . . .	Onondaga . . .																												
Syracuse . . .	"	30.03	30.71	14	29.32	25	1.39	79.4	24.0	30.1	57.0	25	4.0	15	53.0	12.8	36.0	15	3.0	26	i	9	18	16	2.81	0.51	.100		S.
Oswego . . .	Oswego . . .	30.01	30.68	14	29.36	25	1.32			*27.8	57.0	25	4.0	4	53.0	12.8	36.0	15	3.0	26	i	9	18	16	2.81	0.51	.100		S.

METEOROLOGICAL DATA FOR FEBRUARY—CONTINUED.

LOCATION OF STATIONS.		BAROMETER.				HUMIDITY.		TEMPERATURE—(In Degrees Fahr.)												SKY.			PRECIPITATION—(Inches.)			WIND.					
STATION.	COUNTY.	Mean	Highest	Date	Lowest	Date	Mean Relative	Monthly Range.	Mean	Highest	Date	Lowest	Date	Mean Daily Range	Greatest Daily Range	Least Daily Range	No. of Clear Days	No. of Partly Cloudy Days.	No. of Cloudy Days.	No. of Days on which 0 or more in. fell.	Total for the Month.	Greatest Daily	Average Daily	Total Snow Fall	Prevailing Direction.						
<i>Great Lakes cont'd.</i>																															
Palermo	Oswego	30.00	30.60	14	29.25	25	1.35	81.0	27.0	*33.0	27.4	60.0	25	-1.0	d	61.0	18.3	38.0	15	7.0	9	6	14	3.45	.75	.123	11.8	N. W.			
Lyons	Wayne										30.0	59.0	25	7.5	15	51.5	14.2	35.0	15	7.0	7	0	13	9	0.44	.054	3.5				
Palmyra											30.0	61.0	24	6.0	4	55.0											N. S. E.				
Erie, Pennsylvania .	Erie	30.00	30.60	14	29.25	25	1.35	81.0	27.0	*33.0	29.3	60.0	15	0.0	5	60.0	15.8	43.0	5	3.0	26	3	7	18	0.99	.116	12.0	N. W.			
<i>Central Lakes.</i>											29.5	62.5	25	2.0	15	54.8	17.0	43.0	15	4.0	7	5.5	13.5	9.0	1.52	1.27	.099	12.1			
Fleming	Cayuga										27.3	55.0	25	3.0	15	52.0	15.9	34.0	15	7.0	h										
Geneva	Ontario										30.2	60.0	25	2.0	15	58.0	16.0	43.0	15	7.0	1								S.		
Romulus	Seneca										82.6	22.2	27.1	56.0	25	3.5	14	52.5	17.0	39.0	3	6.5	4	7	20	1	3.04	0.90	.109	14.5	
Hammondsport	Steuben										31.0	59.0	25	5.0	6	54.0	17.6	40.0	6	4.0	7	6	5	2.12	1.27	.076	14.2	N. W.			
Ithaca	Tompkins	30.02	30.67	14	29.34	25	1.33	73.1	24.2	32.0	62.5	25	5.0	15	57.5	18.4	38.0	15	9.0	1	4	7	17	14	3.17	0.64	.113	7.5	S. E.		
Mean		30.04	30.78	15	29.25	25	1.32	81.9	23.5	27.6	64.9	17	-19.0	5	54.7	17.2	47.0	15	0.0	1	4.8	10.3	12.9	12.4	4.02	1.80	.142	16.1	S. W.		

(a) 16, 25; (b) 24, 25; (c) 4, 5; (d) 5, 15; (e) 5, 15, 28; (f) 4, 14; (g) 3, 15; (h) 1, 7; (i) 7, 8; (j) 1, 26; (k) 1, 17; (l) 10, 27; (m) 17, 19, 28; (n) 19, 28; (p) 1, 25; (q) 14, 27; (r) 16, 27; (s) 16, 19, 21, 27; (t) 21, 26; (a) 7, 8, 18.

*The means are derived from the maximum and minimum temperatures. † Temperature record from Draper Thermograph.

DAILY AND MONTHLY MEAN TEMPERATURES FOR FEBRUARY, 1891.

STATION.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Month. Mean.
Western Plateau	35.5	27.5	26.5	7.5	21.1	33.9	31.7	29.8	33.6	26.7	23.8	30.1	24.8	17.1	32.8	43.0	36.5	27.8	25.2	33.8	37.0	24.6	30.6	42.3	42.3	24.1	15.5	18.9	.	28.9		
*Alfred Centre	36.0	28.2	26.9	9.7	15.2	32.7	33.2	29.0	29.8	27.2	23.0	29.0	27.2	16.5	25.2	42.5	37.5	29.0	23.0	31.5	39.0	24.5	25.2	38.5	41.5	24.5	15.5	21.0	.	27.9		
Angelica . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Humphrey	36.5	31.5	24.8	8.0	24.0	36.2	32.2	28.5	34.2	24.2	29.0	33.2	31.5	26.0	39.2	45.2	44.8	23.8	25.5	35.8	36.5	23.5	31.8	42.0	38.8	22.8	14.5	16.8	.	30.0		
†Arkwright	29.8	29.0	27.3	28.6	21.8	34.9	43.5	37.8	27.9	24.9	35.8	35.4	24.6	32.3	44.0	40.6	23.2	16.1	18.1	.	30.3	
Jamestown	36.3	30.3	34.3	11.0	19.3	36.7	32.3	31.3	36.7	27.7	24.3	32.7	30.0	23.3	39.0	46.0	45.7	27.7	26.0	37.0	39.3	26.0	31.3	43.7	44.0	24.0	18.7	21.0	.	31.3		
Sherman	32.5	32.1	19.8	6.8	24.0	35.2	31.0	32.2	33.8	20.2	28.1	28.0	26.2	21.2	43.0	43.0	38.5	21.5	31.2	41.8	33.0	23.0	35.0	44.5	34.8	13.2	14.8	.	29.2			
Elmira	39.2	32.0	30.1	9.2	25.2	39.5	35.0	32.5	37.0	29.8	26.8	34.5	26.5	17.8	23.5	44.8	37.5	33.2	28.2	35.5	42.0	27.5	34.2	47.5	50.0	27.5	18.8	22.0	.	31.7		
Alabama	33.5	22.0	22.5	5.5	22.5	30.5	29.0	28.5	35.0	26.5	20.0	28.0	26.5	13.0	34.0	41.0	30.0	23.0	34.0	37.5	22.5	31.0	45.0	43.0	23.5	11.5	18.0	.	27.3			
*LeRoy	36.5	23.5	26.2	8.5	19.0	34.0	30.5	30.5	32.5	27.5	25.5	32.0	26.0	16.0	27.0	42.5	30.0	29.0	30.0	36.5	25.5	30.0	42.5	45.5	28.0	17.5	23.5	.	28.6			
*Mount Morris	39.0	26.0	34.0	11.0	23.0	37.2	34.0	32.3	33.8	33.5	26.6	32.9	28.8	19.2	30.5	48.0	32.0	31.5	27.8	34.5	40.0	29.2	32.0	42.5	48.5	27.8	20.5	25.5	.	31.5		
Pendleton Centre	35.0	22.0	24.5	5.0	24.0	31.5	32.0	30.5	36.0	31.5	22.5	26.0	13.5	33.5	39.5	30.5	27.5	25.5	34.5	32.0	23.5	31.0	43.0	42.0	24.5	16.5	17.5	.	27.9			
Wedgewood	35.6	25.1	25.0	3.9	19.5	33.9	30.6	26.8	29.4	23.9	21.8	27.0	22.9	8.7	30.7	42.1	34.5	27.4	22.3	30.1	36.2	25.0	27.4	40.4	41.2	22.3	13.4	18.4	.	26.6		
Addison	39.8	31.1	29.5	11.0	23.0	35.8	33.0	32.8	35.5	29.8	23.3	32.8	27.5	17.0	32.0	41.8	37.6	31.2	27.2	34.2	39.5	28.5	33.0	44.2	46.1	26.2	18.2	24.0	.	30.9		
South Canisteo	36.0	29.5	26.8	7.2	20.8	32.2	31.2	29.2	33.8	25.8	22.2	29.8	24.2	16.0	35.5	41.5	37.2	27.2	24.0	30.5	37.5	23.2	28.5	41.2	41.8	22.8	12.2	15.8	.	28.0		
Arcade	33.0	28.4	19.1	4.2	21.4	30.1	30.5	27.1	34.7	21.8	19.6	27.5	23.2	13.6	35.7	41.1	39.3	23.0	21.8	34.5	34.0	20.2	29.9	40.3	36.7	18.3	12.0	12.8	.	26.2		
†Italy Hill	33.5	22.6	27.0	4.6	14.4	29.4	29.4	26.4	28.8	24.7	21.2	28.0	23.2	13.4	28.0	42.0	34.7	29.9	22.0	26.8	36.2	22.0	25.8	35.6	40.5	22.5	14.2	15.0	.	25.8		
Eastern Plateau	37.5	27.2	30.6	9.2	16.7	30.3	30.7	28.6	30.7	29.2	19.3	26.2	24.7	12.0	21.5	40.5	38.2	32.2	22.6	27.6	36.2	25.7	26.6	40.8	46.4	29.0	17.3	22.5	.	27.8		
Binghamton	38.0	30.8	30.8	8.5	23.0	35.0	31.5	28.2	33.5	30.0	20.5	30.0	25.8	13.8	29.2	40.5	45.8	31.2	22.5	32.0	37.0	26.2	31.8	45.0	46.5	27.5	19.0	22.2	.	29.8		
*Oxford	36.0	27.7	29.0	11.7	12.2	27.5	32.0	28.2	27.0	28.5	20.7	23.5	24.2	9.5	15.5	32.0	39.5	34.5	20.8	24.2	33.5	27.0	21.2	36.5	45.5	31.5	17.5	19.5	.	26.3		
South Kortright	36.0	22.5	37.5	6.0	12.0	29.5	29.0	30.0	29.5	28.0	18.5	22.5	21.0	9.5	16.0	42.0	39.0	32.0	20.0	28.0	40.0	24.0	24.5	41.5	51.5	28.0	15.0	23.0	.	25.5		
Brookfield	35.5	24.5	24.8	4.5	16.5	32.0	28.0	28.7	32.7	24.0	16.5	25.0	21.7	4.2	22.7	41.2	40.0	27.0	15.5	28.7	34.7	21.5	26.2	40.0	40.2	25.0	15.7	21.2	.	25.6		
†Pompey . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Middletown	41.2	33.2	33.0	11.2	19.0	32.5	31.5	27.5	30.2	31.2	25.5	29.5	31.2	20.5	25.2	41.5	39.8	35.2	26.5	25.2	36.5	.	28.5	40.2	43.0	32.0	19.5	29.0	.	30.3		
†Port Jervis	38.0	30.5	33.0	13.0	15.0	27.5	32.0	31.0	27.5	34.5	21.5	24.0	28.5	19.0	17.0	40.0	38.0	34.5	26.5	26.5	33.5	30.0	25.0	36.0	50.0	31.5	19.5	23.0	.	28.8		
†Port Jervis	37.9	34.0	32.7	18.0	17.8	30.2	30.6	31.2	22.8	33.7	26.5	25.0	28.4	23.7	20.8	39.5	39.2	36.6	28.6	27.0	32.6	33.0	27.8	37.0	48.7	35.1	23.5	23.7	.	30.2		
Cooperstown	36.3	18.5	28.2	5.5	16.2	30.8	27.8	26.8	33.8	27.0	16.5	26.0	21.2	4.2	21.2	41.2	37.9	29.0	18.0	25.2	37.2	22.5	26.8	41.8	43.2	26.0	16.0	21.0	.	25.9		
Quaker Street	35.0	16.0	26.5	5.0	10.0	25.5	27.0	23.0	25.0	27.5	12.5	22.5	20.5	7.0	9.0	42.0	31.5	29.5	17.5	21.0	33.5	20.5	19.0	33.5	45.5	27.0	15.5	22.5	.	23.2		
Hyndsville . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Middleburgh	38.2	33.7	34.2	9.2	19.2	30.5	33.5	28.2	32.0	30.5	19.5	28.0	25.5	10.5	24.5	43.7	32.7	32.2	22.2	26.5	35.5	25.5	29.2	47.0	51.2	29.0	18.7	25.0	.	29.2		
Perry City	36.5	25.4	26.2	6.5	19.5	33.0	32.0	27.2	33.2	27.2	16.5	31.9	20.5	6.6	26.0	40.8	34.7	29.1	23.7	32.0	36.1	24.8	29.8	42.0	42.1	25.8	13.2	19.5	.	27.2		
*Apalachin	40.0	33.0	34.5	20.5	16.0	31.5	32.0	30.5	30.0	33.0	23.5	23.5	19.5	21.0	40.0	38.0	30.0	29.0	38.0	31.5	26.0	40.5	50.5	37.5	21.5	22.0	.	30.7				
Waverly	39.0	30.0	29.1	9.0	22.2	36.8	32.0	34.2	34.5	28.5	19.8	28.5	30.0	20.0	30.5	40.6	40.0	34.0	32.0	29.0	39.0	29.0	21.0	46.2	47.6	27.0	17.0	22.2	.	30.7		
Northern Plateau	29.7	15.0	26.2	-5.1	8.9	27.0	25.1	17.1	27.0	21.2	11.3	20.7	13.7	-0.7	16.6	37.0	28.8	24.0	13.6	22.5	34.4	17.8	20.0	37.4	38.2	22.3	13.2	14.0	.	20.5		
†Lyon Mountain	30.1	10.8	24.0	-9.8	6.5	23.9	22.2	17.7	23.4	22.6	10.7	24.6	15.8	-2.6	20.5	34.0	23.6	24.5	9.8	18.4	33.0	13.4	14.9	36.2	42.0	21.5	11.2	13.8	.	19.2		
Keene Valley	15.0	19.5	18.0	-0.5	5.5	28.5	20.0	19.5	24.0	12.0	15.5	25.0	14.5	9.0	11.0	37.0	26.0	19.0	19.5	24.0	37.0	35.5	37.5	29.5	18.0	14.5	10.5	.	20.7			
Ampersand . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Constableville	33.0	18.5	36.0	-6.0	12.8	26.0	27.0	13.8	29.0	22.5	9.2	17.0	13.8	-1.2	16.5	36.8	32.2	23.0	14.8	22.5	34.2	12.5	19.0	39.5	38.8	24.5	12.8	14.2	.	21.2		
Lowville	34.5	15.0	28.5	-1.0	12.5	25.0	28.0	16.0	30.0	25.5	12.0	19.0	14.5	-1.5	19.0	40.0	29.5	28.0	16.0	24.5	35.5	18.5	19.0	38.5	41.5	25.0	14.5	16.5	.	22.3		
†Number Four	32.0	12.5	25.0	-5.5	10.0	24.0	25.0	18.5	28.5	22.0	11.0	20.5	11.5	-3.0	17.0	37.0	31.5	25.0	11.0	24.0	33.5	14.0	37.0	39.5	21.5	12.5	14.5	.	20.2			
Turin	33.5	13.6	25.5	-7.8	6.0	22.4	28.4	16.9	26.8	22.3	9.6	17.0</																				

DAILY AND MONTHLY MEAN TEMPERATURES FOR FEBRUARY—CONTINUED.

80

STATIONS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Month. Mean.
<i>Hudson Valley continued</i>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*Watervliet Arsenal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Honey Mead Brook	37.8	27.0	35.1	12.9	18.4	31.5	32.1	25.0	32.0	31.8	20.5	29.0	27.2	12.0	24.5	41.2	37.5	34.0	24.8	27.1	34.9	28.5	25.5	41.1	51.5	31.0	20.2	27.5	29.3			
*Poughkeepsie	38.6	35.0	29.9	...	14.3	21.7	28.0	26.1	23.0	35.4	24.8	23.8	33.8	17.7	16.0	36.0	37.8	39.6	27.6	27.2	31.2	32.2	24.5	35.9	49.4	39.6	25.7	21.2	...	29.5		
*West Point	35.0	33.0	30.5	12.5	8.5	20.0	26.0	26.5	21.5	30.0	23.5	20.0	20.0	14.0	12.5	30.0	40.0	23.0	23.0	26.0	35.0	27.5	26.5	42.5	33.5	26.0	15.0	...	25.6			
Boyd's Corners	43.8	33.5	37.0	18.2	21.2	34.2	34.8	28.0	32.2	37.2	24.2	32.2	33.0	16.5	25.5	45.0	44.2	39.5	28.8	30.0	37.2	33.5	30.0	44.5	51.2	33.2	23.2	30.0	32.9			
*Carmel	41.5	36.5	34.5	15.5	16.5	35.5	33.5	29.5	24.5	34.5	26.5	31.0	33.5	22.0	20.0	41.5	47.0	38.5	28.5	28.0	34.0	34.0	27.5	41.0	45.5	39.0	23.5	20.0	...	31.5		
†Minnewaska	34.2	24.5	27.0	11.0	11.5	28.2	30.2	24.2	25.5	27.5	18.0	24.0	29.0	14.2	27.0	38.5	42.0	33.5	17.5	21.0	31.2	24.0	20.0	34.5	44.5	27.2	15.5	21.0	...	25.9		
¶Minnewaska	35.5	29.0	30.8	9.8	10.3	28.2	30.1	25.6	23.6	29.3	21.1	25.0	28.8	17.8	16.2	39.0	41.4	34.8	21.2	20.8	32.3	26.9	22.7	33.8	43.5	30.5	17.6	...	26.7			
†Rondout	38.5	28.0	28.0	12.0	15.0	27.0	29.5	27.5	29.5	33.0	27.0	25.0	15.0	10.5	34.0	38.0	34.5	34.5	24.5	27.0	35.0	30.5	33.0	39.0	44.0	31.5	22.0	29.0	28.7			
¶Rondout	38.9	32.4	31.8	17.8	16.1	29.6	29.9	30.3	28.1	34.5	22.9	26.8	28.1	14.1	17.5	28.9	36.4	36.4	27.9	27.6	32.9	23.2	27.8	37.4	45.0	35.1	25.4	26.7	...	29.3		
Peekskill	39.0	32.0	34.5	13.7	18.5	30.2	31.5	28.5	29.7	34.2	26.5	27.0	31.0	15.2	21.7	44.0	41.5	35.0	26.5	26.5	35.5	32.5	28.0	39.0	50.2	32.0	22.0	26.0	...	30.4		
<i>Mohawk Valley</i>	31.5	28.2	24.5	7.8	15.8	34.0	36.0	28.5	30.8	28.8	23.0	25.0	22.2	13.5	14.2	36.2	39.0	30.0	29.2	27.2	32.2	23.2	27.0	38.8	38.0	29.0	24.0	24.2	...	27.3		
*Rome	27.5	29.0	19.0	2.5	17.0	34.0	36.0	25.0	28.0	28.5	24.0	24.5	20.5	12.5	17.0	37.5	36.0	22.5	23.5	28.0	33.0	21.0	26.0	43.5	40.0	23.0	22.0	15.5	...	25.8		
*Utica	35.5	27.5	30.0	13.0	14.5	34.0	36.0	32.0	33.5	29.0	22.0	25.5	24.0	14.5	11.5	35.0	42.0	37.5	35.0	26.5	31.5	25.5	28.0	34.0	36.0	35.0	26.0	33.0	...	28.8		
<i>Champlain Valley</i>	31.9	20.0	28.6	5.1	7.9	25.3	28.1	24.4	26.4	24.4	15.0	16.6	17.9	8.0	12.3	33.0	28.9	30.4	16.8	19.4	31.9	26.3	17.5	35.4	41.9	31.2	23.2	19.6	...	23.2		
Plattsburgh	33.4	11.9	28.6	0.0	12.2	30.3	26.5	15.8	27.0	29.6	14.2	23.5	16.3	2.0	18.1	38.3	22.5	29.4	15.1	22.2	37.3	20.0	21.4	37.7	45.4	30.0	19.6	21.8	...	23.2		
*Plattsburgh Barracks	28.0	22.5	23.0	4.0	7.5	15.0	28.0	26.0	25.5	32.5	20.0	14.5	19.5	17.0	16.5	22.5	30.5	28.5	13.5	13.5	31.0	12.5	34.0	39.0	34.0	23.5	21.5	...	22.6			
¶Saratoga	35.7	26.6	30.0	12.0	11.5	27.4	29.9	28.4	25.5	32.2	22.8	22.6	20.7	9.9	10.5	36.4	32.1	32.6	23.5	22.0	32.8	29.6	21.7	36.6	44.0	33.3	22.9	22.3	...	26.3		
Queensbury	30.5	19.0	33.0	4.5	0.5	28.5	28.0	27.5	27.5	4.5	3.0	6.0	15.0	3.0	4.0	35.0	31.0	15.0	19.5	31.0	24.5	14.5	33.5	39.0	37.5	27.0	13.0	...	20.9			
<i>St. Lawrence Valley</i>	29.1	9.2	25.3	-0.2	17.6	31.2	23.1	14.4	28.9	20.2	18.3	28.5	17.0	4.3	27.0	38.8	23.5	26.7	16.2	26.1	35.8	18.6	24.1	42.9	42.3	25.9	18.6	22.4	...	23.7		
Malone	27.0	3.5	21.0	-5.8	14.0	30.2	22.5	11.2	29.8	24.8	13.0	27.0	14.8	-1.0	26.0	36.5	17.0	23.0	12.0	23.2	36.0	14.0	21.8	41.8	45.2	23.2	15.0	17.2	...	21.1		
*Madison Barracks	37.5	24.0	29.0	16.0	12.0	31.5	26.5	18.5	22.0	31.5	23.5	32.0	27.0	11.0	23.0	39.5	35.5	34.0	21.0	23.5	39.0	26.0	22.5	38.5	38.5	29.5	19.0	23.0	...	26.9		
Watertown	30.8	16.0	26.2	0.4	22.0	31.4	25.2	17.0	36.2	24.4	21.4	30.5	17.4	4.2	33.2	39.8	25.8	26.5	20.2	30.9	30.1	20.9	28.0	45.4	42.6	24.4	17.9	17.7	...	25.4		
Canton	25.0	6.8	25.5	-8.2	19.5	32.2	21.2	10.8	...	17.2	27.8	14.5	1.0	31.2	36.2	21.8	27.0	13.8	29.1	36.2	15.2	27.0	44.8	42.8	24.8	15.8	17.8	...	22.2			
*Massena	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Hammond	31.2	9.2	26.8	-1.8	20.2	31.0	23.5	17.5	30.2	29.0	20.2	26.8	16.5	10.0	24.5	47.5	23.2	26.5	16.8	38.5	39.0	18.0	23.5	43.0	41.2	29.5	26.8	43.2	...	26.1		
Ogdensburg	26.0	1.2	25.8	5.2	18.5	31.2	21.8	14.8	28.4	25.9	17.7	27.6	14.9	4.4	26.0	36.4	22.1	25.5	17.0	16.0	36.2	20.0	20.6	43.0	42.9	26.2	18.5	18.4	...	22.6		
Potsdam	26.0	3.8	22.8	-7.0	17.2	31.0	21.0	10.8	27.0	25.8	14.8	28.0	13.8	0.2	25.2	35.8	19.2	24.2	12.8	21.5	34.2	15.8	25.0	43.8	43.0	24.0	17.5	19.2	...	21.3		
<i>Great Lakes</i>	37.3	25.1	29.2	11.6	22.7	33.8	33.4	27.9	34.7	30.4	26.3	30.7	25.6	15.5	32.8	42.8	33.1	31.5	26.5	32.4	38.2	26.4	31.4	44.3	42.8	27.9	20.4	22.1	...	30.0		
¶Dunkirk	37.0	31.4	30.4	13.5	26.8	36.4	33.5	33.2	38.1	30.6	29.4	33.0	29.6	24.2	39.2	45.7	35.8	31.5	28.4	38.9	38.9	30.8	36.2	47.2	43.4	27.8	20.2	22.0	...	32.6		
*Buffalo	39.0	24.0	32.0	9.0	22.0	35.0	34.0	30.0	36.0	28.0	28.0	32.0	30.0	20.0	33.0	38.0	36.0	33.0	26.0	36.0	40.0	25.0	32.0	46.0	42.0	27.0	18.0	22.0	...	30.5		
*Fort Porter	37.0	28.5	37.0	24.0	11.5	24.0	34.5	31.0	31.5	35.5	26.0	27.0	23.5	22.0	33.0	39.0	38.0	35.5	26.0	34.5	31.0	24.5	32.5	43.0	37.0	22.5	20.5	30.0	...	30.0		
Brockport	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*Rochester	38.0	22.0	32.0	9.0	22.0	34.0	34.0	28.0	32.0	30.0	28.0	36.0	28.0	16.0	30.0	46.0	30.0	30.0	28.0	32.0	40.0	26.0	32.0	46.0	48.0	28.0	20.0	24.0	...	30.2		
*Fort Niagara	39.5	28.0	30.0	15.5	21.5	36.0	35.0	33.0	36.5	35.0	29.0	33.0	29.5	23.5	31.0	45.5	35.0	31.0	29.0	31.5	38.5	30.5	32.5	45.0	39.0	30.5	24.5	23.0	...	31.8		
Hess Road Station	33.2	26.5	22.2	12.0	29.7	32.5	32.5	30.2	37.5	28.5	25.7	28.2	28.7	15.0	40.5	41.2	29.5	28.7	26.0	34.2	37.5	25.5	35.0	46.2	41.0	25.7	17.7	19.7	...	29.7		
Baldwinsville	38.2	23.5	29.5	12.2	27.0	37.2	32.5	27.2	36.2	29.2	24.2	28.5	21.2	10.8	30.8	42.8	35.0	31.8	30.5	34.2	39.2	26.2	29.2	45.8	46.0	29.5	19.8	20.0	...	29.9		
Syracuse	38.5	21.4	27.9	9.9	22.3	36.9	32.2	26.8	28.8	25.4	33.0	23.1	8.0	30.4	44.3	35.0	30.4	23.8	33.3	39.9	24.9	32.3	47.0	47.7	...	23.1	30.1	...	30.1			
*Oswego	37.0	18.0	31.0	8.0	18.0	34.0	33.0	23.0	28.0	30.0	25.0	29.0	24.0	10.0	22.0	42.0	29.0	36.0	24.0	27.0	38.0	25.0	28.0	42.0	47.0	28.0	20.0	24.0	...	30.2		
Palermo	35.2	20.0	26.2	11.0	22.1	34.0</																										

DAILY AND MONTHLY PRECIPITATION FOR FEBRUARY, 1891—(INCHES.)

DAILY AND MONTHLY PRECIPITATION FOR FEBRUARY—CONTINUED.

DAILY AND MONTHLY PRECIPITATION FOR FEBRUARY—CONTINUED.

STATIONS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
<i>Great Lakes cont'd.</i>		
Fort Porter10	.15	.	.	.	.	.	.	.	.	.	.25	.	.	.	.	.	.	.	.	.	3.50		
Adams Centre	.	.10	.	.17	.	.	.	.	.	.	.	.	.	.	.07	.17	.	.	.	.	.	.	.	.23	.	.	.	.04	.	1.28
Chittenango		
Brockport		
Rochester	.	.09	.08	.06	.04	T.	.26	.44	.86	.07	.01	T.	.	T.	.52	.76	.13	T.	.56	.12	.02	.01	.03	.11	.05	.14	.07	.	4.17			
Fort Niagara	.	.	T.	.08	.	.	.	.	.08	.	.	.	.	.	.06	*	+ .76	.	.	.86	.	.	*	.	.25	.03	.	.04	.	2.42
Hess Road Station	.	.31	T.	.05	.	.	.	.	.96	.	.10	.	.	.	.11	.	.09	.87	T.	.51	.29	.	.	.	.20	.02	.01	.13	.	3.65
Baldwinsville	.	.54	.	.	.	.20	.	.	.80	.	.07	.05	.	.	.	.46	.26	.06	T.	.73	.09	T.	.	.14	.25	T.	.20	.10	.	3.95
Syracuse	.	.15	.03	.23	.15	.	.	.	.42	.38	.29	.15	T.	.	T.	.20	.68	.05	.01	.45	.25	.02	.01	.29	.07	T.	.09	.05	.	3.97
Lyndonville	.	.27	.	.11	.	.	.	.	.	.37	.	.13	.	.	.	.	.98	.05	.	.41	.31	.	.	.	.18	.	.	.02	.	2.83
Demster	.	.73	.	.11	.30	.	.	.	T.	.13	.25	.17	.14	.	.	T.	.15	.45	.12	.	.30	.	.	.66	.	.	.	.20	.	3.79
Oswego	.	.51	T.	.06	.01	.	.	T.	.13	.25	.17	.14	.	.	T.	.17	.40	.06	.	.21	.15	T.	.	.08	.43	.	.02	.	2.81			
Palermo	.	.30	.	T.	.15	.	T.	*	+ .75	.20	*	+ .60	.	.	*	+ .60	T.	.	.	.40	.	.	.10	.15	.	3.45	
Sand Bank	T.	T.	.04	.08	.	.	.	.	.18	.44	.18	T.	.30	.21	.	.	.	.	.	.	.	.
Lyons	T.	T.	.05	T.	.	.	.	T.	.04	.76	.10	T.	.91	.06	T.	.	.10	T.	T.	.	1.52			
Palmyra	.	T.	T.	.08	T.99	.	.05	T.	.	.	T.	.04	.97	.94	.08	.	.61	.24	.01	.	.04	.27	.03	.05	.04	.	3.14	
Erie, Pennsylvania	.	.45	.02	.10	.03	T.	.	.	.48	.03	.54	.02	.	.	T.	.	.97	.94	.08	.	.61	.24	.01	.	.04	.27	.03	.05	.04	.	4.95	
<i>Central Lakes</i>	.	0.05	T.	0.03	T.	0.00	0.00	0.93	0.28	0.33	T.	T.	0.00	0.00	T.	0.00	0.08	0.69	0.01	T.	0.41	0.02	T.	0.00	0.01	0.11	0.00	0.01	0.03	.	2.76	
Fleming	1.70		
Geneva	.	T.90	.28	.30	.	.	.	T.	.	.10	.62	.03	.	.5803	.10	.	.01	.07	.	3.04	
Romulus	1.2709	.63	2.12	
Hammondsport	1.00	.65	.58	.	.	.	.	.	.87	.	.	.50	.	.	.	.	.18	.	.	.	.	3.78		
Ithaca	.	.22	T.	.11	T.55	.18	.43	.02	T.	.	T.	.	.14	.64	.	T.	.48	.07	T.	.	.02	.22	.	.04	.05	.	3.17	
Average	.	0.24	0.03	0.16	0.05	0.01	0.03	0.31	0.45	0.21	0.19	0.01	T.	T.	T.	T.	0.26	0.43	0.09	0.01	0.34	0.23	0.06	T.	0.05	0.27	0.11	0.06	0.09	.	3.87	

* Amount included in next measurement. † Not used in computing the averages. ‡ Record for the month incomplete.

TEMPERATURE AND RAIN FALL STATISTICS—FEBRUARY.

STATION.	COUNTY.	TEMPERATURE—(DEGREES FAH.)										RAIN FALL—(INCHES.)										
		Normal for the Month of February.			Length of Record—Years.			Extremes of Monthly Mean Temperature for February.				Average for the Month of February.			Length of Record, Years.			Extremes of Monthly Precipitation for February.				
		Record Begins . . .	Record Ends . . .	Mean for February, 1891.	Highest . . .	Departure from the Normal . . .	Year . . .	Lowest . . .	Year . . .	Record Begins . . .	Record Ends . . .	Total for February, 1891.	Year . . .	Record Begins . . .	Record Ends . . .	Total for February, 1891.	Year . . .	Greatest . . .	Least . . .			
Western Plateau		24.1	9	1855	1890	30.8	+5.4	33.6	1857	12.5	1875	2.01	8	1856	1890	3.37	+0.84	.23	.233	1890	0.10	1875
*Angelica	Allegany	21.4	9	1855	1890	30.8	+5.4	33.2	1890	14.3	1885	0.99	8	1856	1890	2.36	+1.29	7.30	1887	1.03	1889	
Humphrey	Cattaraugus	24.6	8	1884	1891	30.0	+5.4	33.2	1890	14.3	1885	3.26	9	1883	1891	4.55	+1.46
*Elmira	Chemung	26.3	13	1851	1891	31.7	+5.4	32.1	1890	14.8	1885	1.79	15	1852	1891	2.19	+0.40
Eastern Plateau		22.6	13	1851	1891	28.3	+2.2	30.9	1828	10.4	1838	2.54	14	1854	1887	3.80	+1.35
Pompey	Onondaga	21.8	21	1826	1858	25.9	+4.5	31.7	1857	10.5	1885	2.21	34	1854	1887	4.76	+2.55	5.21	1887	0.60	1856	
Cooperstown	Otsego	21.4	36	1854	1891	25.9	+4.5	32.1	1890	14.8	1885	3.46	8	1880	1891	4.03	+0.57	4.29	1884	1.62	1885	
Waverly	Tioga	24.7	10	1882	1891	30.7	+6.0	32.1	1890	14.8	1885	1.95	10	1882	1891	2.88	+0.93	2.96	1883	0.86	1888	
Northern Plateau		20.7	13	1851	1891	20.7	0.0	20.7	1842	25.3	1841	2.02	21	1879	1891	2.71	+0.09
*Keene Valley	Essex	20.7	7	1879	1891	20.7	0.0	20.7	1842	25.3	1841	2.62	7	1879	1891	2.71	+0.09
Coast Region		30.7	13	1851	1891	36.2	+5.4	36.7	1867	24.0	1868	4.35	21	1870	1891	4.89	+0.54
*Brooklyn	Kings	31.2	28	1841	1873	37.9	+6.7	39.0	1842	25.3	1841	3.67	21	1870	1891	6.09	+0.85	6.09	1885	1.45	1872	
Fort Hamilton	"	30.6	31	1843	1874	36.4	+5.8	37.5	1867	24.0	1868	4.80	6	1885	1891	6.26	+1.46	7.08	1886	2.19	1889	
New York City	New York	31.7	21	1871	1891	37.6	+5.9	40.0	1890	23.0	'75-'85	3.17	18	1874	1891	4.14	+0.97	6.36	1877	1.38	1885	
†Fort Columbus	"	30.5	52	1822	1874	35.1	+4.6	41.3	1828	21.5	1836	2.16	17	1836	1891	3.00	+0.84	4.08	1853	0.20	1840	
Setauket	Suffolk	29.7	6	1885	1891	35.1	+5.4	37.6	1890	27.4	1889	3.34	41	1840	1887	4.68	+1.34	6.22	1847	0.63	1856	
White Plains	Westchester	30.6	28	1862	1891	34.9	+4.3	37.9	1890	22.0	1868	3.63	9	1866	1891	6.00	+2.37	6.40	1870	1.22	1872	
Hudson Valley		26.4	13	1828	1891	28.2	+7.1	30.0	1884	15.3	1885	2.37	21	1829	1891	4.11	+1.74	4.40	1847	0.80	1837	
Albany	Albany	24.9	18	1874	1891	28.2	+3.3	33.0	1884	15.3	1885	3.03	33	1826	1889	5.35	+2.32	6.20	1840	0.52	1830	
*Watervliet Arsenal	"	23.7	31	1824	1854	29.5	+2.2	36.3	1842	14.0	1836	1.39	14	1840	1889	5.35	+2.32	6.20	1840	0.52	1830	
*Poughkeepsie	Dutchess	27.3	18	1828	1870	29.5	+2.2	33.0	1842	18.2	1885	2.32	30	1840	1889	5.60	+0.21	3.55	1869	0.20	1840	
West Point	Orange	28.9	60	1824	1887	25.6	-3.3	39.6	1842	18.6	1836	2.05	29	1840	1891	2.64	+1.29
*Rondout	Ulster	27.0	21	1828	1891	29.3	+2.3	36.0	1842	18.6	1836	2.11	7	1841	1891	1.86	-0.25
Mohawk Valley		23.8	13	1828	1891	28.8	+5.0	30.0	1842	18.6	1836	2.73	14	1866	1891	3.04	+0.31	4.96	1876	0.96	1874	
*Utica	Oneida	23.8	31	1826	1891	28.8	+5.0	33.4	1828	13.7	1836	2.39	22	1828	1891	3.62	+1.23	6.42	1890	0.03	1830	
Champlain Valley		19.3	32	1839	1891	22.6	+3.3	26.4	1840	7.2	1885	2.77	14	1866	1891	3.66	+0.89
Plattsburgh Barracks	Clinton	19.3	32	1839	1891	22.6	+3.3	26.4	1840	7.2	1885	1.39	30	1840	1889	1.60	+0.21	3.55	1869	0.20	1840	
St. Lawrence Valley		19.6	13	1866	1891	24.1	+4.5	24.1	1891	10.4	1875	2.32	18	1877	1891	2.64	+1.29
Madison Barracks	Jefferson	22.6	29	1829	1874	26.9	+4.3	30.7	1840	14.2	1843	2.05	29	1840	1891	2.05	0.00	4.52	1851	0.30	1873	
*Canton	St. Lawrence	18.8	28	1862	1888	22.2	+4.1	26.5	1877	6.4	1875	2.11	7	1841	1891	1.86	-0.25
North Hammond		18.9	13	1866	1891	26.1	+7.2	26.1	1891	10.4	1875	2.73	14	1866	1891	3.04	+0.31	4.96	1876	0.96	1874	
*Potsdam	"	19.0	23	1828	1891	21.3	+2.3	28.9	1828	9.5	1838	2.39	22	1828	1891	3.62	+1.23	6.42	1890	0.03	1830	
Great Lakes		25.6	13	1871	1891	30.0	+4.4	32.6	1882	12.8	1875	2.77	1	1871	1891	3.66	+0.89
Buffalo	Erie	24.9	21	1871	1891	30.5	+5.6	32.6	1882	12.8	1875	2.81	21	1871	1891	4.14	+1.33	5.16	1876	0.46	1877	
Rochester	Monroe	24.7	21	1871	1891	30.2	+5.5	32.6	1882	14.8	1875	2.68	21	1871	1891	4.17	+1.49	5.40	1876	0.46	1877	
Fort Niagara	Niagara	27.4	24	1843	1891	31.8	+4.4	34.4	1882	12.7	1885	2.03	31	1841	1887	2.42	+0.39	4.12	1887	0.31	1877	
Oswego	Oswego	25.1	21	1871	1891	27.8	+2.7	32.4	1882	12.7	1885	2.51	21	1871	1891	2.81	+0.30	4.74	1881	0.22	1877	
Palermo	"	20.4	39	1854	1891	27.4	+7.0	27.5	1890	9.8	1885	3.08	37	1860	1887	3.45	+0.37	7.20	1886	0.10	1877	
Lyon	Wayne	27.9	5	1860	1891	30.0	+2.1	32.1	1890	19.4	1889	3.49	18	1874	1891	3.95	+1.46	8.50	1887	0.33	1877	
Palmyra	"	26.1	9	1835	1891	29.3	+3.2	33.8	1890	19.4	1889	1.80	1	1851	1891	3.10	+1.30
Erie, Pennsylvania	Erie	27.9	18	1874	1891	33.0	+5.1	36.0	1882	16.0	1875	1.55	20	1851	1891	3.04	+1.49	3.26	1853	0.17	1856	
Central Lakes		25.9	13	1874	1891	31.1	+5.2	35.0	1882	16.0	1875	2.06	13	1879	1891	3.17	+1.11	4.21	1887	0.63	1886	
*Geneva	Ontario	26.1	14	1854	1891	30.2	+4.1	34.1	1890	15.5	1885	2.06	13	1879	1891	3.17	+1.11	4.21	1887	0.63	1886	
Ithaca	Tompkins	25.7	13	1879	1891	32.0	+6.3	32.1	1890	15.5	1885	2.69	1	1851	1891	3.69	+0.94

* The location of the instruments has been changed during the period covered by the record.

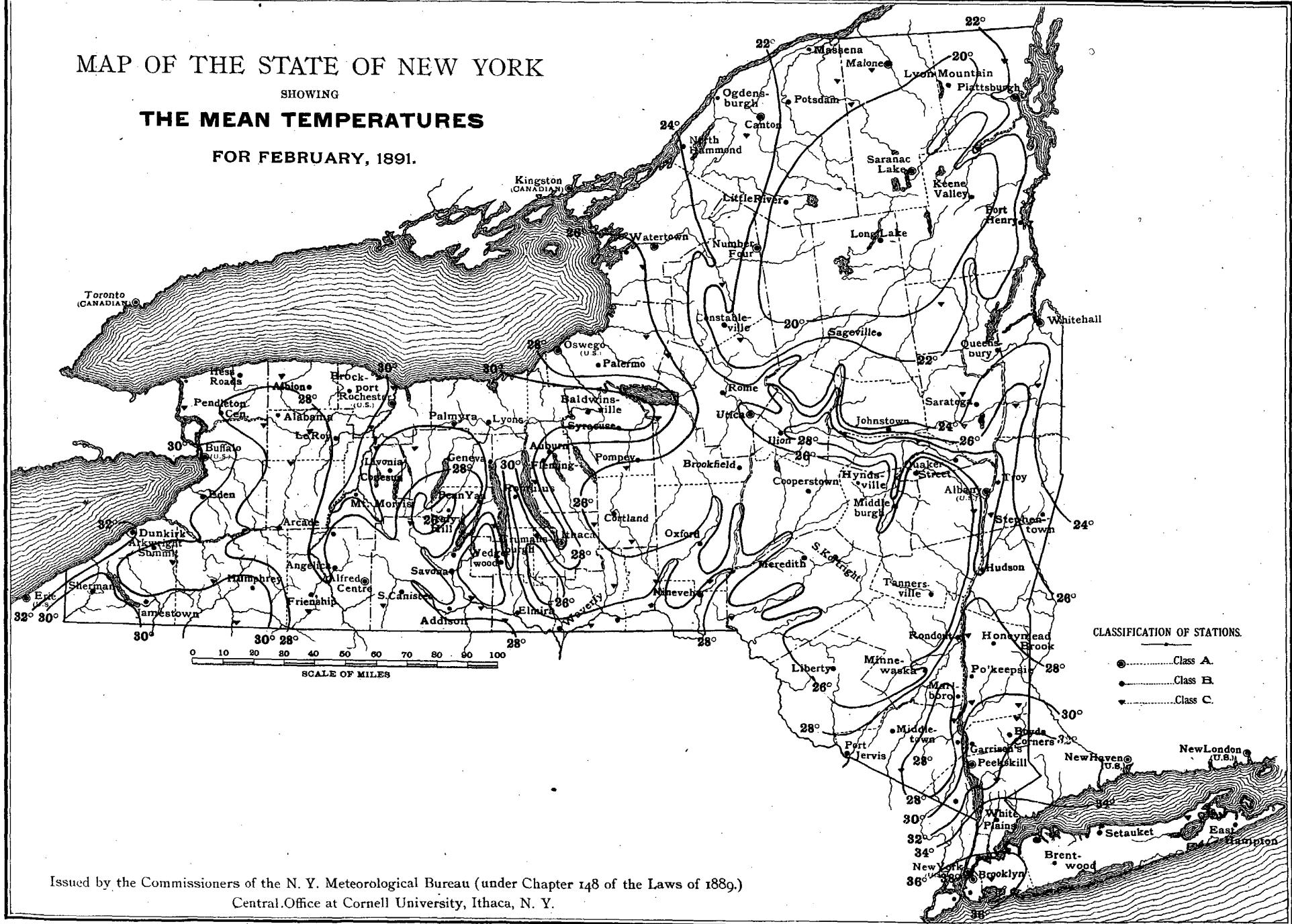
† Extremes from 1822 to 1874 inclusive.

REPORT OF THE VERIFICATION OF WEATHER AND TEMPERATURE FORECASTS FOR FEBRUARY, 1891.

PERSONS TO WHOM THE REPORTS ARE SENT.	STATION.	PERCENTAGE OF VERIFICATION.		
		Weather.	Temperature.	Weather and Temperature Combined.
Preston & Fish	Adams	96	87	92.4
F. S. Place	Alfred Centre.	83	78	81.0
James P. Mills	Ampersand	—	—	—
S. C. Suydam	Baldwinsville	92	79	86.8
H. J. Green	Brooklyn	92	92	92.0
L. C. Shepard	Brushton	96	96	96.0
C. W. Jameson	Burke	88	96	91.2
Alex. Coulter	Cazenovia	—	—	—
H. E. Goodspeed	Chateaugay	83	92	86.6
John Streeter	Chatham	78	57	69.6
H. A. Reynolds	Collin's Centre	100	92	96.8
Paul T. Brady	Cooperstown	—	—	—
Gerity Bros.	Elmira	79	79	79.0
C. Hawley Barnes	Havana	—	—	—
C. H. Spaulding	Hess Road Station	88	88	88.0
A. H. Bunnell	Hornellsville	92	96	93.6
C. P. Bouton	Hyndsville	100	100	100
Cornell University and } Treman, King & Co. }	Ithaca	83	83	83.0
F. W. Hyde	Jamestown	96	91	94.0
J. E. Kraft	Kingston	88	88	88.0
C. W. Breed	Malone	78	61	71.2
R. R. Y. M. C. A.	Mechanicsville	88	100	92.8
F. X. Straub	Middleburgh	83	75	79.8
S. P. Campbell	New Lebanon Centre	88	88	88.0
Jerome Trussell	North Lawrence	96	100	97.6
C. J. Wells	Oneida	100	88	95.2
Dr. J. N. Tilden	Peekskill	71	96	81.0
George W. Hickey	Plattsburgh	74	74	74.0
T. R. Anderson	Port Jervis	92	98	94.4
J. L. Thayer	Sherman	91	78	85.8
Phœnix Hotel	Sing Sing	68	76	71.2
D. C. Sharpe	South Kortright	86	79	83.2
The Herald Co	Syracuse	96	100	97.6
N. D. McCutchen	Tarrytown	91	96	93.0
C. L. Adams	Trumansburg	83	71	78.2
Geo. A. Fairbanks	Watertown	87	78	84.4
P. A. Deyo & Son	Yonkers	87	91	88.6
Average for the State		87.7	86.2	87.0

NOTE.—The monthly percentage of verifications for weather and temperature combined is determined by multiplying the percentage of weather verifications by six, and the percentage of temperature verifications by four, and dividing the sum of these products by ten.

MAP OF THE STATE OF NEW YORK
SHOWING
THE MEAN TEMPERATURES
FOR FEBRUARY, 1891.



Issued by the Commissioners of the N. Y. Meteorological Bureau (under Chapter 148 of the Laws of 1889.)
Central Office at Cornell University, Ithaca, N. Y.

MAP OF THE STATE OF NEW YORK
SHOWING
THE PRECIPITATION
FOR FEBRUARY, 1891.

